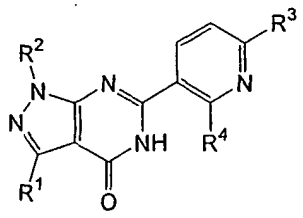
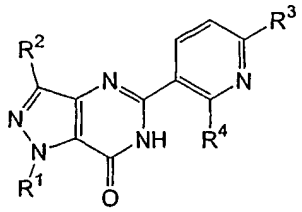
CLAIMS

1. Pyridinylpyrazolopyrimidinone derivative represented by the following formula (IA) or (IB):



(IA)



(IB)

wherein:

R^1 is substituted or unsubsituted C_3-C_8 cycloalkyl group or tert-butyl group;

R^2 is a hydrogen atom or C_1-C_3 alkyl group;

R^3 is a group: $-NR^5R^6$, $-C(=O)R^7$ or $-S(O)_{0-2}R^8$;

R^4 is a hydrogen atom or C_1-C_3 alkoxyl group which is unsubstituted or substituted by one or more fluorine atom(s);

R^5 and R^6 are, same or different from each other, a hydrogen atom, substituted or unsubsituted C_1-C_6 alkyl group, substituted or unsubsituted acyl group, substituted or unsubsituted heterocycloalkyl group, and substituted or unsubsituted heterocycloalkyl ring is formed with nitrogen atom which is binding R^5 and R^6;

R^7 is a group: $-OR^9$ or $-NR^5R^6$;

R^8 is a hydrogen atom, a halogen atom, a group: $-NR^5R^6$, substituted or unsubsituted C_1-C_6 alkyl group, or substituted or unsubsituted aryl group;

R^9 is a hydrogen atom or substituted or unsubsituted C_1-C_6 alkyl group;

or pharmaceutically acceptable salts or solvates thereof.

2. The compound represented by the formula (IA) according to claim 1.

3. The compound represented by the formula (IB) according to claim 1.

4. The compound according to claim 1, 2 or 3, in which R^1 is

cyclohexyl group or cycloheptyl group.

5. The compound according to any one of claims 1 to 4, in which R^2 is methyl group.

6. The compound according to any one of claims 1 to 5, in which R^4 is methoxy or ethoxy group.

7. The compound according to any one of claims 1 to 6, in which R^3 is a group $-NR^5R^6$.

8. A pharmaceutical composition containing a compound according to any one of claims 1 to 7, or pharmaceutically acceptable salts or solvates thereof as active ingredient.

9. A PDE 7 inhibitor containing a compound according to any one of claims 1 to 7, or pharmaceutically acceptable salts or solvates thereof as active ingredient.